



Notice of Allowability

Application No.

10/717,765

Applicant(s)

LYSAGHT, RICHARD G.

Examiner

Anthony T. Dougherty

Art Unit

2863

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to IDS filed 12/11/2003.
2. ☒ The allowed claim(s) is/are 1-17.
3. ☒ The drawings filed on 20 November 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date <u>12/11/03</u> | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

DETAILED ACTION

PRIOR ART

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 4,791,838 to Bickford et al. because it teaches determining torque load applied to an air driven tool.

U.S. Patent No. 4,864,903 to Bickford et al. because it teaches determining torque load applied to an air driven tool.

U.S. Patent No. 5,592,396 to Tambini et al. because it teaches determining and controlling torque applied by a fluid driven tool, see specifically Figure 4 and respective portions of the specification.

U.S. Patent No. 5,689,434 to Tambini et al. because it teaches determining and controlling torque applied by a fluid driven tool, see specifically Figure 4 and respective portions of the specification.

U.S. Patent No. 5,903,462 to Wagner et al. because it teaches an air driven tool control program alterable by a user to change torque and speed based on a particular fastener being driven.

U.S. Patent No. 6,134,973 to Schoeps because it teaches a control program for shut down of an air driven tool as a target torque is reached.

U.S. Patent No. 6,655,471 to Cripe et al. because it teaches a control for an air tool using angular velocity to determine torque for control purposes.

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U.S. Patent No. 6,567,754 to Lysaght because it teaches all of the elements of claims 1 and 11 except identifying and storing a portion of the air pressure as a calibration value used by the microprocessor to identify and store the parameter of a dynamic threshold and further does not qualify as prior art based on filing and publication dates under 35 U.S.C. 102.

U.S. Patent No. 5,937,370 to Lysaght because it teaches a system involving two air pressure ranges (which is the equivalent of three threshold air pressures since the ranges share a boundary (see Fig 5A and column 2 line 1 through line 6, first range is the calibration window, the second range is from the top dashed line of the calibration window to the maximum pressure)) for measuring air pressure of a pneumatic pulse tool and converting it into an electric signal (see column 2 line 57 through line 60), means for processing the electronic signal including a programmed microprocessor (see column 2 line 60 through line 65), with a processor configured to identify and store a parameter of a first threshold air pressure (see Fig 5A-5C, bottom dashed line of Calibration Window) identifying a tool driving a fastener to its target torque (see Fig 5A, Tx, Free Run, and column 6 line 1 through line 3), a parameter of a second air pressure (see Fig 5A-5C, top dashed line of Calibration Window) to count a completed cycle when the pressure is the same as a second stored pressure (see Fig 5A, Pulsing), and a third air pressure (see Fig 5A-5C, Pressure Max) to indicate a shut off region when the measured pressure is above the third identified and stored parameter (see Fig 5A, Ty, Calibration Window and column 6 line 23 through line 24). However, Lysaght does not teach a parameter of a first threshold air pressure identified and stored by a microprocessor to tell when a tool is in cycle or to begin monitoring an air pressure indicative of a parameter of a cycle and identifying a parameter of air pressure during a pulsing region and storing this air pressure as a calibration

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value used by the microprocessor to identify and store the parameter of a dynamic threshold corresponding to the pulsing region.

Allowable Subject Matter

2. Claims 1-17 allowed.

3. The following is an examiner's statement of reasons for allowance:

The primary reason for the allowance of claims 1-17 is the inclusion of the limitations of monitoring an air driven pulse tool by identifying a parameter of air pressure during a pulsing region and storing this air pressure as a calibration value used by the microprocessor to identify and store the parameter of a dynamic threshold corresponding to the pulsing region. It is these limitations found in each of the claims, as they are claimed in the combination, that has not been found, taught or suggested by the prior art of record which makes these claims allowable over the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony T. Dougherty whose telephone number is (571) 272-2273. The examiner can normally be reached on Monday through Friday from 8 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Barlow can be reached on (571) 272-2269. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


atd


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